

### **Remarks**

Applicants would like to thank the Examiner for the review of the present application.

### **In the Claims**

Claims 1-4, 6-10, and 14-23 are currently pending in the application. Claims 5 and 11-13 were previously cancelled. No new matter has been added.

### **Rejections under 35 USC §103**

The Office action rejects claims 1-4, 6-10, 14-17 and 21-23 under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,973,481 issued to Thompson et al. ("Thompson") in view of U.S. Patent Application Publication No. 2003/0220717 issued to Underwood et al. ("Underwood"). Applicants respectfully disagree.

Applicants disagree that it would have been obvious for one of ordinary skill in the art at the time the invention was created to include the teachings of Underwood into the system and methods as disclosed by Thompson. The Office action states that the motivation is "using a remote SCADA system a user can control the quality of a utility, such as water, by taking the appropriate action to successfully perform processes based on prompts from the control system", see Office action dated February 26, 2010, page 7, citing Underwood at [0049]-[0050]. It is not obvious for one of ordinary skill in the art of water treatment systems to look to the art of power generating systems in designing a system, nor is the corollary obvious. A "SCADA" system is known in the art and its use is not limited to power generating systems or water treatment systems. In fact, Underwood fails to provide detailed description regarding the "SCADA" system, further evidencing that one of ordinary skill in the art is familiar with such systems. One

of ordinary skill in the art would not find the discussion of a SCADA system applicable to any one field and, thus, there is no motivation to combine the teachings of Thompson with the teachings of Underwood. Further, Applicants believe that even if the teachings of Underwood were combined into the systems disclosed by Thompson, as suggested on the Office action, the result still would not include all of the elements required by claims 1, 21 and 23.

Claims 1, 21 and 23 require “an input sensor for measuring source water entering the water purification device”. Thompson in view of Underwood fail to disclose at least an input sensor for measuring source water entering the water purification device as required by claims 1, 21 and 23 and therefore, even if combined and modified as suggested by the Office action, Thompson in view of Underwood fail to render claims 1, 21 and 23 unpatentable.

In response to Applicants arguments made with respect to this rejection in the previous Office action dated July 17, 2009, the Office action states that “Underwood teaches that the controller, using influent valves, controls the flow of water into the system. That is, based on the valve position the amount of water entering the purification device is known and controlled by the controller”. See Office action dated February 26, 2010, page 9, citing Underwood at [0024]. The Office action further states that “Underwood goes on to teach that a sensor can be used to ensure that the valve is in the proper position to regulate the amount of water (flow) being input into the system [0035]” and then states “furthermore, the base reference Thompson teaches using measured inputs and measured outputs to calculate efficiency of the generation device, citing col. 8, line 65-col. 9 line 10. See Office action dated February 26, 2010, page 9.

However, Underwood teaches an “influent valve 202 prior to entry into a filter bed 206...the influent valve 202 controls the flow of water from the WATER SOURCE to the filter bed 206. The level of water in the filter bed 206 can be ascertained by a level sensor 208”. See

Underwood, [0025], lines 2-5 and 11-14. Underwood further states that “the state of a valve may be ascertained by a sensor monitoring an actuator coupled to a valve”. See Underwood, [0035], lines 204. Underwood’s influent valve is either “open”, allowing flow, or is “closed”, preventing flow, and thus may either allow influent or not. It is not possible for Underwood’s influent valve to provide any measurement of source water. Underwood’s influent valve, as stated by Underwood, “controls the flow of water into the system”. There is no teaching, suggestion or motivation that, based on the position of the influent valve, i.e., based on whether the valve is open or closed, “the amount of water entering the purification device is known” as suggested by the Office action.

Further, there is no motivation in Underwood to alter this influent valve 202 to “calculate efficiency of the water purification (generation) device”, as suggested in the Office action. See Office action dated February 26, 2010, pages 9-10. Underwood clearly discloses that the influent valve controls the flow of water from the WATER SOURCE to the filter bed 206. Further, Underwood states that the “level of water in the filter bed 206 can be ascertained by a level sensor 208”. No where in Underwood is the volume of treated water measured, nor any discussion, suggestion or teaching ascertain either the volume of water flowing into the system nor the volume purified. Thus, there is no motivation to modify the influent valve of Underwood to become a means for calculating efficiency of the water purification (generation) device. Further, if the influent valve 202 were modified as suggested in the Office action, it would no longer function as an “on” or “off” valve and therefore, would cease to perform as indicated and required by Underwood.

Thus, for at least the reasons discussed above, Applicants have shown that Thompson in view of Underwood fail to disclose all of the elements claimed in claims 1, 21 and 23 and

therefore Applicants respectfully request the Examiner withdraw the rejection of claims 1, 21 and 23 under 35 U.S.C. §103(a) over Thompson in view of Underwood. Applicants additionally request the withdrawal of the rejection of claims 2-4, 6-10, 14-20 and 22 as these claims depend from a base claim which has been shown to be allowable.

The Office action rejects claims 18-20 under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,973,481 issued to Thompson et al. ("Thompson") in view of U.S. Patent Application Publication No. 2003/0220717 issued to Underwood et al. ("Underwood") and in further view of U.S. Patent No. 6,568,416 to Tucker et al. ("Tucker"). Applicants respectfully disagree.

As discussed above, Applicants have shown claim 1 to be allowable. Therefore, Applicants believe claims 18-20 are also allowable as these claims depend from a base claim which has been shown to be allowable. Thus, Applicants respectfully request the Examiner withdraw the rejection of claims 18-20 under 35 U.S.C. §103(a) over Thompson in view of Underwood and further in view Tucker.

### Conclusion

For the foregoing reasons all of the claims of the present invention are patentable over the art of record. It is believed that all of the claim rejections have been addressed and that the application is now in condition for allowance. Reconsideration of the claims and issuance of a notice of allowance are respectfully requested. If any matter arises which may expedite issuance of a notice of allowance, the Examiner is requested to call the undersigned, at the telephone number given below.

Applicants request that \$810.00 be charged to Deposit Account No. 50-4383 to cover the fee for the Request for Continued Examination.

Applicants believe that a three-month extension of time is required and hereby petition for a three-month extension of time. Applicants request that the associated extension fee be charged to Deposit Account No. 50-4383. Applicants also request that any other fee required for timely consideration of this application be charged to Deposit Account No. 50-4383.

Date: August 26, 2010

Respectfully submitted,

/Michelle Saquet Temple/

Michelle Saquet Temple  
Registration No. 48,834  
Attorney for Applicants

DEKA Research & Development Corp.  
340 Commercial Street  
Manchester, NH 03101-1129  
Tel: (603) 669-5139  
Fax: (603) 624-0573